

Abstract

A stator of an electric machine, which stator has an annular stator core (13) comprised of at least one stator core segment (14), having a welding seam (20) that joins the at least one stator core segment (14). In the stator, the welding seam depth (T_S) of the welding seam is a function of a yoke height (H_{yoke}) and a tolerance value (ΔT_S) and is described by the function

$$T_S = 0.5\text{mm} * (H_{yoke}/\text{mm} - 1) \pm \Delta T_S.$$

(Fig. 2)